If you have been forwarded this message and would like to subscribe to future publications or you wish to no longer receive future publications please contact me here.

California's Energy Policy

With the energy blackouts of 2001 still fresh in our minds, California must aggressively pursue an energy policy that addresses increasing its energy supply, upgrading its infrastructure and redoubling its conservation efforts.

Need for Liquefied Natural Gas

Natural gas is essential to California's basic energy needs, especially for electricity. Power plants burn thirty-six percent (36%) of the natural gas used in the State, producing 42% of our electricity. In addition, there are as many as two dozen new natural-gasfired generators that may be built here in the next few years. Yet, only 15% of the natural gas we use is produced

News of the Week

Runner's High Speed Chase Bill Passes Committee

Runner Requests Hearings on Some Schools Pending Financial Crisis

Seeking Local Control Over Group Homes

Governor Praises Minutemen

Secretary Riordan Steps Down from Post

Attorney General Lockyer Won't Run for Governor

Workers Compensation Rates Expected to Decrease

Briefing Report: Levee Maintenance

here; and our usual imports are dwindling, as natural gas exporters in the west and Canada focus on their own needs. To have reliable, affordable electricity and, with it, a chance to remain economically competitive, California must find an alternative supply of natural gas, and a reliable supply chain. Arguably, liquefied natural gas (LNG) is the best alternative.

What is LNG?

LNG is liquid natural gas. Cooling natural gas to minus 259 degrees Fahrenheit (-161 $^{\circ}$ C), makes it a clear, colorless, odorless liquid, occupying only 1/600th (0.2%) of its gaseous volume and weighing less than half of water. This makes it economic to transport and store.

LNG Producers and Terminals

Most of the world's LNG supply is from countries with large natural gas reserves, including Algeria, Australia, Brunei, Indonesia, Libya, Malaysia, Nigeria, Oman, Qatar, Russia, and Trinidad and Tobago. Worldwide, there are 40 LNG receiving terminals, but none of the current terminals in the U.S. serves the West Coast.

Due to the special tankers and properties of LNG, special terminals are needed for off-loading and storage. At most terminals, LNG is transferred to insulated storage tanks, above or below ground, to preserve its temperature. When users need natural gas, the LNG is warmed, converting it back to gas. After conversion, the natural gas is stored or

shipped via pipeline.

LNG Background

LNG itself is not corrosive, explosive, flammable, or toxic, and is not stored or transported under pressure. Unlike oil, LNG spills cause no damage to water or land because if LNG contacts a warmer surface like air or water, it vaporizes rapidly. As the vapor warms, it becomes lighter than air and rises. Mixed with air, it is flammable only if the mixture is between 5% and 15% natural gas. Preventing and responding immediately to spills are major factors in the design and operation of LNG carriers and terminals.

Because of its very low temperature, LNG is transported by special tankers rather than via pipeline. The tankers are double-hulled, heavily insulated, and specially designed to handle LNG. Storage tanks allow a controlled escape of LNG that "boils off" as temperature rises. If LNG vapors are not vented, temperature and pressure continues to rise, with potentially dangerous results. Venting the vapor keeps a constant pressure and temperature. The boil-off gas may be collected and used for fuel.

LNG Safety

In the past 40 years, some 120 million metric tons of LNG have been transported worldwide over a distance of more than 60 million miles each year, with no incidents posing a risk to the public or injury to personnel. Legislation is pending which grants exclusive federal jurisdiction for LNG facilities; but requires consultation with states on safety issues, and permits state officials to conduct safety inspections at operating terminals.

West Coast LNG Terminal Proposals

Several LNG terminals have been proposed along the West Coast, but energy experts say California can support only two or three of the terminals proposed.

Key LNG Terminals proposed to serve California

Name	Location	Owner	Cost	Capacity	LNG Source	Online
Crystal	12.6 mi.	Joint venture of	\$300	800 mmcfd	Alaska,	early
Clearwater	offshore, west	Crystal Energy and	millio		Southeast Asia,	2007
Port	of Port	Woodside Petroleum	i		Australia	
	Hueneme, CA					
Long Beach	Long Beach, C	Sound Energy	\$450	700 mmcfd	Australia, Malaysia,	2008
LNG Import		Solutions, a	millio		Alaska	
Terminal		subsidiary of				
		Mitsubishi Corp.				

Conclusion

California needs more natural gas, particularly in light of the energy shortage experts are predicting in the very near future. LNG is a safe, economic, and practical way to increase the State's supply. In order to import LNG, California will need a terminal, or terminals, and the sooner we act to secure the terminal the more stable and cost effective our energy markets will be. Most importantly, California must act now to address future energy issues instead of reacting once the problem is upon us.

If you would like to contact Senator Runner, please click here: Email - Website

OFFICES

Capitol

State Capitol, Room 4066 Sacramento, CA 95814 Phone: 916-445-6637 Fax: 916-445-4662

Antelope Valley

848 W. Lancaster Blvd, Ste 101 Lancaster, CA 93534

Phone: 661-729-6232 Fax: 661-729-1683

Victorville

Victorville City Hall 14343 Civic Drive, First Floor Victorville, CA 92392 Phone: 760-843-8414

Fax: 760-843-8348

Santa Clarita – San Fernando Valley – Ventura County

Santa Clarita City Hall 23920 Valencia Blvd., Suite 250 Santa Clarita, CA 91355 Phone: 661-286-1471 Santa

Clarita Valley

Phone: 661-286-1472 San

Fernando Valley & Ventura County

Fax: 661-286-2543